

IN THE CLAIMS

Please amend the claims as follows.

Sub E17 8. (Twice Amended) A method of forming a device structure that combines insulating materials for alignments posts and optical interference layers associated with an active device structure in a silicon body comprising:

providing a silicon wafer having a pattern of active device structures therein and thereon;

forming a first metallic layer over the surface of said wafer;

DI forming a second metallic layer over said first metallic layer, which is used both for connections and for bonding pads;

forming a silicon dioxide insulation over said second metallic layer;

forming a third metallic layer over said layer of silicon dioxide;

forming a photoresist mask over said third metallic layer having a covering over planned pixel locations of said liquid-crystal-on-silicon display device;

removing said third metallic layer not covered by said photoresist mask;

removing said photoresist mask to provide that each said pixel retains said third metallic layer, which shall act as a mirror reflector for light incident upon said liquid-crystal-on-silicon display device; and

depositing optical interference layers of silicon oxide or silicon nitride or silicon oxide or silicon nitride over said third metallic layer and said silicon dioxide layer.

D1
cont

9. (Amended) The method of claim 8 wherein said alignment posts are formed by the process of silicon dioxide by wet etching upon said silicon substrate.

D2

11. (Amended) The method of claim 9 for forming a photoresist mask over said silicon oxide layer to cover the location of each planned alignment post.

D3

12. (Amended) The method of claim 9 for removing said silicon oxide layer to form said alignment posts with a wet etch (such as HF or buffered HF), and removing said photoresist mask.

13. (Amended) The method of claim 8 wherein said alignment posts are formed by the process of amorphous silicon by plasma etching upon said silicon substrate.

Sub E2/
D34
15. (Amended) The method of claim 13 for forming a photoresist mask over said amorphous silicon layer to cover the location of each planned alignment post.

16. (Amended) The method of claim 13 for removing said amorphous silicon to form said alignment posts by plasma etch, and removing said photoresist mask.

Sub E3/
Cent.
19. (Amended) The method of claim 17 for forming a photoresist mask over said PECVD oxide layer to expose the location of each planned alignment post.

DET
20. (Amended) The method of claim 17 for forming post cavities by plasma etching of said PECVD oxide layer.

21. (Amended) The method of claim 17 for plasma enhanced chemical vapor deposition of silicon nitride into said post cavities.

D6
22. (Twice Amended) The method of claim 17 for etch-back removal of said silicon nitride, except that silicon nitride deposited in said post cavities.

Sub E 37
cont.
D97

23. (Amended) The method of claim 17 for removing the PECVD oxide layer by wet etch (such as HF or buffered HF) to form said silicon nitride alignment posts, and removing said photoresist mask.

24. (Amended) The method of claim 8 wherein said alignment posts are formed by the process of insulation material by lift-off upon said optical interference layer OIL.

Sub E 47
DB

26. (Amended) The method of claim 24 wherein a photomask is used to form said cavities in said silicon monoxide by a CF4 plasma etching of the silicon monoxide, after which the silicon monoxide serves as a mask for an oxygen plasma etching of said two-micron bottom photoresist.

DA

28. (Amended) The method of claim 24 for removing said bottom photoresist layer by lift-off with an ultrasonic bath, leaving said alignment posts.

Sub E 57
D90

31. (Amended) The method of claim 29 for exposing said photosensitive polyimide at the location of each planned alignment post.